# 2021 Hard Surface & Automotive Guide 🚾



This guide covers the application of Createx Colors paints as part of a basecoat / clearcoat process onto hard surfaces, otherwise referred to as "automotive". This guide covers the basic application process. This guide does not replace the need for a test panel anytime using a new paint or coating. Goto creatextech.com for Createx paint tech data sheets.

# Dry Times for Adequate Curing are set for 70°F / 21°C and 50% Relative Humidity

- Extend drying times in colder temps. down to 60 deg. F<sup>o</sup>, painting under not recommended.
- Allow paint to dry in temperatures over 60 deg. Fo during the initial 48 hours after application.

# **MIX SET-UP / REDUCTION**

ADD 4050 UVLS GLOSS CLEAR to Createx paint to create an acrylic-urethane resin-based paint.

- Airbrush: Add 10% per. volume to Createx paints, then thin 10% or more with 4011 Reducer
- Spray-gun: Add 10% 25% per volume.
  - Mix 4050 Gloss Clear 9:1 (10%) Createx Airbrush / Wicked Colors Opaque or Standard-Transparent Color
  - Mix 4050 Gloss Clear 3:1 (25%) Createx Airbrush / Wicked Colors Pearl or Metallic Color
  - Mix 4050 UVLS Gloss Clear 6:1 candy20, see candy20 TDS for more.
  - Thin with 4011 Reducer in small increments of 5% per volume. Often, 10% 15% works, candy20 does not require thinning after mixing with 4050 Gloss Clear
- > Allow mix 10+ minutes to acclimate before spraying for best flow and leveling.
- AutoBorne Sealer does not require mixing with 4050; thin with 4011 Reducer 5% 10% per vol.

**4011 Reducer** – the goto, standard thinner for all Createx Colors paints and clears.

- 4013 Reducer substitute thinner for 4011, 4013 is compliant for CA's South Coast AQMD Rule 1401. **4050 UVLS Clear** an acrylic-urethane clear introduced in early 2020 which works better as a balancing clear (additive) than the original Createx 4030 Balancing Clear. Refer to 4050 UVLS Gloss tech data sheet for complete UVLS Clear info.
  - 4030 Balancing Clear still works well as an additive to improve adhesion & durability of Createx paints onto hard-surface and is better than not adding a 4030 or 4050 for best performance, refer to 4030 TDS for more.

NO POT-LIFE Createx paints do not have a pot-life after mixing with 4030 Balancing Clear or 4011 Reducer, however, the reduced paint will eventually lose water-content and thicken after several weeks. Repeated exposure to fresh air when the cap is opened to pour paint also promotes curing, which will eventually thicken paint.

- Paint is best only kept for a short duration under a week after mixing with 4011 Reducer or other thinners.
- Keep capped air-tight when not pouring paint. Store in paint cabinet or a box in a dry, cool closet.

## STRAIN COLORS PRIOR TO USE

Mesh size 190 micron, candy20 125 micron, PPS Cup 200 micron (solvent lid)

## **Spray-Gun & Airbrush Settings**

SPRAY GUN – Compatible with any HVLP & conventional gravity-fed spray gun.

- Tip-size: 1.2mm 1.3mm
- Mini Spray Gun: 0.8 1.2mm
- PSI: Follow spray-gun manufacturer's settings, often the upper psi limit of spec'd setting

AIRBRUSH – All Createx Colors paints can be sprayed through a 0.5mm tip-sized, larger volume airbrush.

- For smaller tip-sized airbrushes, use transparent colors such as Wicked Colors, Illustration Colors, Auto Air or Createx Airbrush Transparent Colors. Mix each with 4030 Balancing Clear 10% per volume, then
- thin 10% or more with 4011 Reducer, add in small increments of 5% at a time, up to 25% per volume.
- candy2o spray well through any airbrush tip-size. Refer to candy2o Tech Data Sheet for airbrush mix info.

# **Preparation**

This guide covers substrates in good condition, or otherwise ready for paint using a quality primer. Createx paints are compatible with any primer, paint, and clear type as well as OEM finish.

If applying a primer, allow it to thoroughly dry, then sand or scuff before applying paint.

Sandpaper 320 – 800 grit may be used to prepare for Createx paints.

- 320 grit for AutoBorne Sealer & 4050 UVLS Gloss Clear used as adhesion primer.
- 600 800 grit when airbrushing direct to substrate or using transparent colors.
- Medium & coarse scuff pad may be used with the scratch marks will be covered by AutoBorne Sealer.

## Cleaning prior to paint:

- Use soapy water to remove oils, then thoroughly dry surface.
- Wipe with a mild solvent-based degreaser prior to paint.
- Dry surface with lint-free rag.
- Do not use a water-based cleaner before paint. Use solvent-based cleaner.
- Avoid over cleaning. A simple dry wipe with a clean cloth should work in a clean paint environment.

### **Adhesion to Substrates and Sanded Primers**

## 2 Options:

- 1. AutoBorne Sealer direct to sanded primer and to most substrates.
  - Available in high-covering white, grey, black and a full range of intermixable primary and secondary colors.
  - Aluminum and Metallic & Pearl Silver, apply over 6013 Silver Sealer
  - Metallic & Pearl Gold, apply over mix of 6004 Sealer Yellow 1:1 6011 Sealer Tan
  - 6000 AutoBorne Transparent Sealer most adhesive of all sealers.
- 2. UVLS 4050 Gloss Clear Best adhesive coating to most substrates.
  - Direct to Metal, plastic, glass adhesion promoter and more.
  - Adheres direct to any substrate except silicon, may be used as substitute for AutoBorne Sealer.
  - 4051 Satin and 4052 Matte not to be used for adhesive coating, only 4050 Gloss.

#### Substrate Type

- Soft Medium Durometer Plastic AutoBorne Sealer
- Hard Durameter Plastic (if in doubt) 4050 Gloss Clear
- Steel, Stainless Steel 4050 Gloss Clear can be applied direct to metal, however for an edge-to-edge primer, a 2k or self-etching primer provides best protection against corrosion in exterior conditions / automotive.
- Aluminum AutoBorne Sealer
- Fiberglass AutoBorne Sealer
- Glass 4050 Gloss Clear
- 3D Print Composite, hard nylon 4050 Gloss Clear
- Wood 4050 Gloss Clear
- Automotive finish AutoBorne Sealer
- Brass 4050 Gloss Clear
- Chrome 4050 Gloss Clear
- Polished substrates not scuffed 4050 Gloss Clear with 48-hour drying for full cure.
- Flexible vinyl 4050 Gloss Clear
- Rubber 4050 Gloss Clear

### Airbrushing direct to an existing finish

Createx paints have good adhesion when airbrushed direct to primers and most substrates.

- For added adhesion onto harder to paint substrates, a light coat or two of 6000 AutoBorne Transparent Sealer or 4050 Gloss Clear works well to ensure even the lightest airbrush lines adhere well to the surface.
- > AutoBorne Sealer will adhere well to many substrates listed above as those recommended for 4050 Gloss Clear.

Recommendations are for optimum adhesion. With adequate drying times, AutoBorne Sealer works well to most substrates other than metal. Always test first to determine adhesion of any new paint & substrate type.

#### Application

- Follow the spray gun manufacture's recommendations for PSI and fan settings.
- Apply paint in 50/50 overlapped pattern.
- Coats should be medium wet with fine, wetted droplets hitting surface to create coating
- Surface distance is generally 6" 8
- Avoid applying dried paint-particles, created by spraying at too high a psi or distance.

Proper atomization is important for specified dry times, adhesion and a texture-free, level coating.

Complete coverage should require 3 – 4 coats

- Allow each coat to dry matte before next coat
- Re-coat times are generally 5 10 minutes in a spray-booth, x2 open-environment
- Use moving air to assist drying. Do not use heat to force-dry paint as this will result in a loss of adhesion.

## **Application of Top-Coat Clear**

For exterior and automotive paintjobs, a durable clear must be applied over Createx paints.

- Createx paints are compatible with most any clear type, both solvent-based and water-based.
- For best results, allow Createx paint to thoroughly dry for at least 1-hour prior to clear.
- No time windows. Createx paints may be top-coated with a clear any time after drying
- Sanding Createx paints prior to applying a clear is never required for adhesion of clear.

Automotive: use a solvent-based, catalyzed (2k) urethane clear.

- Use a slower, higher temperature reducer
- Avoid fast-cure clears and additives. A longer flow time allows for better adhesion to Createx paints.

Exterior / Outdoor Application – Createx UVLS Clears work excellent.

- Allow a minimum of 48-hours before exposing UVLS Clear to direct contact with outdoor elements
- A second application session of clear helps ensure a weatherproof, pinhole-free clear over paint.

2k epoxy clear recommended for marine, including boats, watercraft, and fishing lures.

## **Drying Times and Curing**

- Dry Times for Adequate Curing are set for 70°F / 21°C and 50% Relative Humidity.
- Createx paints may dry to the touch in 10 minutes to 1-hour. Final cure is not until 48-hours.

Minimum Recommended Drying Times

- Re-coat in a booth: 10 minutes / 20 minutes open
- Tape and Dry Sand: 45-minutes
- Solvent-based clear: 1-hour

No time windows. Createx paints may be re-coated or top-coated with a clear any time after drying.

Use moving warm air to assist drying. Do not force cure with convection heat process.

#### **Cleaning & Wiping Createx Paints**

- Use a solvent-based degreaser, not water-based cleaner.
- Use mild / post-sanding strength degreaser.
- A tack rag made for water-based / waterborne paints works best to clean with.
- Allow tack rag to "gas out" after opening package and before using onto fresh paint, and avoid pressing down hard onto paint.

After painting, clean spray-gun or airbrush with warm & soapy water.

Soak metallic parts in a bath of 4008 Restorer for 15 – 30 minutes to remove dried, cured paint.

#### **HEALTH & SAFETY**

Read cautions and warnings on labels & Safety Data Sheets, available at www.creatextech.com. Always spray in a well-ventilated area. Always wear a NIOSH / MSHA approved respirator when painting.